



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/815,192

03/31/2004

Helmut Peise

3457-39RE

7933

27799

7590

12/12/2007

COHEN, PONTANI, LIEBERMAN & PAVANE

551 FIFTH AVENUE

SUITE 1210

NEW YORK, NY 10176

EXAMINER

MERKLING, MATTHEW J

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

12/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/815,192	Applicant(s) PEISE ET AL.	
	Examiner Matthew J. Merkling	Art Unit 1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Reissue Applications

1. Applicant is reminded of the continuing obligation under 37 CFR 1.178(b), to timely apprise the Office of any prior or concurrent proceeding in which Patent No. US 5,968,212 is or was involved. These proceedings would include interferences, reissues, reexaminations, and litigation.

Applicant is further reminded of the continuing obligation under 37 CFR 1.56, to timely apprise the Office of any information which is material to patentability of the claims under consideration in this reissue application.

These obligations rest with each individual associated with the filing and prosecution of this application for reissue. See also MPEP §§ 1404, 1442.01 and 1442.04.

2. Claims 1-7 are rejected under 35 U.S.C. 251 as being broadened in a reissue application filed outside the two year statutory period. The term "gasification" and "fluidized bed" are not equivalents, meaning, the term "gasification" encompasses subject matter that is not encompassed by "fluidized bed". A claim is broader in scope than the original claims if it contains within its scope any conceivable product or process which would not have infringed the original patent. A claim is broadened if it is broader in any one respect even though it may be narrower in other respects.

3. The amendment filed 3/31/04 proposes amendments to claims 1-7 that do not comply with 37 CFR 1.173(b), (d), which sets forth the manner of making amendments

Art Unit: 1764

in reissue applications. A supplemental paper correctly amending the reissue application is required. Deleted subject matter in the amendments needs to be contained in brackets rather than lined through.

37 CFR § 1.173 Reissue specification, drawings, and amendments

- (b) *Making amendments in a reissue application.* An amendment in a reissue application is made either by physically incorporating the changes into the specification when the application is filed, or by a separate amendment paper. If amendment is made by incorporation, markings pursuant to paragraph (d) of this section must be used. If amendment is made by an amendment paper, the paper must direct that specified changes be made, as follows:
- (2) *Claims.* An amendment paper must include the entire text of each claim being changed by such amendment paper and of each claim being added by such amendment paper. For any claim changed by the amendment paper, a parenthetical expression "amended," "twice amended," etc., should follow the claim number. Each changed patent claim and each added claim must include markings pursuant to paragraph (d) of this section, except that a patent claim or added claim should be canceled by a statement canceling the claim without presentation of the text of the claim.
- (d) *Changes shown by markings.* Any changes relative to the patent being reissued which are made to the specification, including the claims, upon filing, or by an amendment paper in the reissue application, must include the following markings:
- (1) The matter to be omitted by reissue must be **enclosed in brackets**; and
- (2) The matter to be added by reissue must be underlined, except or amendments submitted on compact discs (§§ 1.96 and 1.821(c)). Matter added by reissue on compact discs must be preceded with "<U>" and end with "</U>" to properly identify the material being added.

Oath/Declaration

4. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

Art Unit: 1764

It does not identify the foreign application for patent or inventor's certificate on which priority is claimed pursuant to 37 CFR 1.55, and any foreign application having a filing date before that of the application on which priority is claimed, by specifying the application number, country, day, month and year of its filing.

5. Applicant is reminded that a "claim" for the benefit of an earlier filing date in a foreign country under 35 U.S.C. 119(a)-(d) must be made in a reissue application, even though such a claim was previously made in the application for the original patent to be reissued. However, no additional certified copy of the foreign application is necessary. The procedure is similar to that for "Continuing Applications" in MPEP § 201.14(b).

In addition, 37 CFR 1.63 requires that in any application in which a claim for foreign priority is made pursuant to 37 CFR 1.55, the oath or declaration must identify the foreign application for patent or inventors' certificate on which priority is claimed unless supplied on an application data sheet (37 CFR 1.76), and any foreign applications having a filing date before that of the application on which priority is claimed, by specifying:

- (A) the application number of the foreign application;
- (B) the foreign country or intellectual property authority; and
- (C) the day, month, and year of the filing of the foreign application.

6. The reissue oath/declaration filed with this application is defective because it fails to contain a statement that all errors which are being corrected in the reissue application **up to the time of filing of the oath/declaration** arose without any deceptive intention on the part of the applicant. See 37 CFR 1.175 and MPEP § 1414.

7. Claims 1-7 are rejected as being based upon a defective reissue oath/declaration under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

The nature of the defect(s) in the oath/declaration is set forth in the discussion above in this Office action.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 1- 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Booker et al. (US 5,464,592) in view of Kummel et al. (US 4,188,915).

Regarding claims 1 and 2, Booker discloses a gasification reactor (10, see abstract) for gasification of carbon containing material (carbonaceous fuel, see abstract), the reactor comprising:

a gasification reaction chamber (combustion chamber, 13);

Art Unit: 1764

a refractory-grade lining (12, col. 2 lines 12-16) configured to form a first, upper part of said reaction chamber (see Fig. 1); and

a cooling wall (throat section, 31) configured to form a second, lower part of said reaction chamber (see Fig. 1), said cooling wall including cooling coils (pipes, 32) connected in a gas-tight manner (welded together using webbing (39), col. 3 lines 24-28), said cooling coils being coated with a heat-conducting refractory layer (see coating on pipes (32) in Fig. 2, col. 3 lines 29-39) and operated, while being cooled by pressurized water (see abstract), and said refractory-grade lining and said cooling wall being joined in an overlapping fashion (see Fig. 2 where cooling wall overlaps refractory lining).

While Booker discloses a refractory grade lining that is placed on the cooling wall (throat) in order to protect the cooling walls from thermal shock and erosion (col. 1 lines 54-61), Booker fails to explicitly disclose that the refractory material consists of ceramic.

Kummel also discloses a gasification reactor that is equipped with a cooling wall (1) lined with tubes (37).

Kummel teaches a ceramic refractory layer coated on the tubes (see abstract) as a preferable way of protecting the cooling tubes from damage due to thermal shock (col. 4 lines 53-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the ceramic refractory layer of Kummel on the cooling wall of Booker as a preferable material to use in order to protect the cooling tubes of Booker from thermal shock.

Furthermore, regarding limitations recited in claims 1 and 2 which are directed to a manner of operating disclosed system, neither the manner of operating a disclosed device nor material or article worked upon further limit an apparatus claim. Said limitations do not differentiate apparatus claims from prior art. See MPEP §2114 and 2115. Further, process limitations do not have a patentable weight in an apparatus claim. See *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969) that states "Expressions relating the apparatus to contents thereof and to an intended operation are of no significance in determining patentability of the apparatus claim.

Regarding claim 3, Booker, as discussed in claim 1 above, further discloses the cooling wall comprises a double mantle design (see Fig. 2 where the cooling wall comprises an inclined floor mantle (adjacent to refractory (22)) and a vertical mantle leading out of the gasification reactor).

Regarding claim 4, Booker, as discussed in claim 1 above, further discloses the second part of the reaction chamber (cooling wall) includes a lower floor (see Fig. 2) and a lower outlet opening (see gas flow direction in Fig. 1).

Regarding claim 5, Booker, as discussed in claim 4 above, further discloses and illustrates that said cooling wall is limited to said lower outlet opening (see Figs. 1 and 2).

Regarding claim 6, Booker, as discussed in claim 4 above, further discloses a cylindrical mantle (shell, 11) surrounding said reaction chamber (see Fig. 1), and cooling means to cool said lower floor and lower outlet opening of said reaction

Art Unit: 1764

chamber (see Fig. 1), said cooling means being connected in parallel with said cylindrical mantle (see flow direction in Fig. 1).

Regarding claim 7, Booker, as discussed in claim 1 above, further discloses said first part and said second part of said reaction chamber are the upper part and lower, part respectively of said reaction chamber (see Fig. 1).

Art Unit: 1764

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Merkling whose telephone number is (571) 272-9813. The examiner can normally be reached on M-F 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MJM

supervisor
GLINN A. CALDAROLA
PRIMARY EXAMINER
GROUP 1100
TC700